


MONTHLY NOISE AND VIBRATION REPORT CITY & SOUTHWEST ACOUSTICS ADVISOR

Project:	Chatswood to Sydenham SSI-7400		
For period:	November 2021	Authorisation:	
Prepared by:	Daniel Weston		
Date of issue:	7 December 2021		

Introduction

EMM Consulting Pty Limited (EMM) presents the November 2021 Noise and Vibration Report for the Sydney Metro City and Southwest project as required by SSI 15_7400 A27 (g) vi.

A reference table for the acronyms used in this report is provided on the last page.

Acoustic Advisor Activity

- Review and endorsement of:
 - Chatswood Gantry Shed Modification CNVIS Rev1; and
 - WISD Amended CNVIS RevB.
- Review and endorsement of out of hours work applications (OOHWA) and extensions for:
 - Barangaroo Station OOHWA002.1 station fit-out works;
 - Barangaroo Station OOHWA 5 Ausgrid Pit Inspection;
 - Artarmon Substation OOHWA 146 Modular Building Delivery and Installation Rev2;
 - WISD OOHWA Ausgrid Spotter Wellington Street RevB;
 - WISD OOHWA 22 Ausgrid Outage at Cope/Raglan Street Intersection RevA;
 - PSISD OOHWA 30 RevB;
 - PSISD OOHWA 31 RevB;
 - VCISD OOHWA 15 for North Site Rev6;
 - VCISD OOHWA 17 for South Site Rev3;
 - Surry Hills BPS OOHWA 170 Albion St Compound Demob Dec 2021; and
 - WISD OOHWA 23 RevB.
- Attendance at Sydney Metro meetings with DPIE, and meetings with CNISD, CSM, PSISD, VCISD, MPISD, LWW (Systems Connect) Barangaroo Station and WISD contractors.

Inspections, audits and site visits

- VCISD Environmental Representative (ER) Inspection 2 November;
- CNISD ER Inspection 3 November;
- Barangaroo Station ER Inspection 11 November;
- WISD ER Inspection 18 November; and
- VCISD north site concrete pour inspection and noise measurements 29 November.

Monitoring status

- Real-time noise and vibration monitoring (with real-time access) is ongoing at Barangaroo (noise only), VCISD, CSM (noise only), SSJ, MPISD, PSISD (noise only) and CNISD sites.

Noise and vibration complaints

- Noise and vibration complaints from CNISD, VCISD, Barangaroo, PSISD, and WISD were received. These complaints were dealt with appropriately by contractors.
- Repeated noise complaints have been received from two separate receivers with respect to CNISD noise and specifically in relation to the night-time tower crane operation. The resolution of these complaints is an ongoing matter which is being managed by the contractor. As AA, we continue to monitor this matter closely in conjunction with Sydney Metro and providing ongoing advice to the contractor on additional feasible and reasonable noise mitigation and management measures and community consultation.

Based on a review of contractor performance throughout November and in consideration of the complaints received, one of the immediate actions taken was to withdraw the approval provided in the November OOHW10 application (version 12 dated 20 October 2021) for tower crane operation between 10pm and 12am for activities other than OSOM girder deliveries.

Initiatives

- Similar to October 2021, the focus this month as relatively new AAs on the project was to visit project sites as soon as possible to gain an understanding of what is occurring 'on-the-ground' and to meet key stakeholders.
- The new concrete pump enclosure installed at VCISD north site was inspected twice during November 2021. Our first inspection was during the regular ER inspection and the second was to observe noise levels during an initial concrete pour. Extended concrete pours at VCISD north site are proposed up until 10pm for up to three evenings per week and therefore this activity and feasible and reasonable noise mitigation has been comprehensively considered. Several additional measures, including modifications to the concrete pump exhaust to allow the pump to sit further inside the enclosure, and also the installation of noise blankets on 'noisy' sections of the concrete supply line were implemented in response to EMM's recommendations, with a material improvement achieved.

Non-compliances, incidents and events

- Incorrect settings on the PSISD contractor's sound level meter were observed which had a material influence on the recorded noise levels. This matter was raised as a non-conformance within the contractor's internal quality assurance systems. Corrective action was taken which included additional training of the team members involved.

Ongoing and upcoming environmental risks

- OOH works, particularly long running concrete pours and/or oversize deliveries at ISD sites through December at WISD, VCISD and CNISD during extended working hours to catch up lost time due to construction pause and other impacts due to Covid.
- A 'watching brief' continues for ongoing OOH girder deliveries at CNISD. The risks associated with this activity have been discussed at length with the contractor and to ensure that all feasible and reasonable measures to mitigate and manage noise levels are duly considered and implemented. There is one more night of OOH girder deliveries for 2021 which are proposed for December 12. This will follow with several weeks of night-time respite for the community.

Recommendations (incl auditing):

- A project wide review of noise and vibration training of contractor staff who are involved with noise and vibration prediction, management and measurement is recommended. This review should also include verification of instrumentation settings. This is in response to recent observations that have been made, most notably with respect to noise measurement practices and instrumentation settings.

Acronyms

<i>CNISD</i>	<i>Crows Nest Integrated Station Development</i>
<i>CNVIS</i>	<i>Construction Noise and Vibration Impact Statement</i>
<i>CSM</i>	<i>Central Station Metro</i>
<i>ER</i>	<i>Environmental Representative</i>
<i>ISD</i>	<i>Integrated Station Development</i>
<i>LWW</i>	<i>Line Wide Works</i>
<i>MPISD</i>	<i>Martin Place Integrated Station Development</i>
<i>OOH</i>	<i>Out of hours</i>
<i>PSISD</i>	<i>Pitt Street Integrated Station Development</i>
<i>SSJ</i>	<i>Sydenham Station Junction</i>
<i>VCISD</i>	<i>Victoria Cross Integrated Station Development</i>
<i>WISD</i>	<i>Waterloo Integrated Station Development</i>